
**Microscopes — Designation of
microscope objectives —**

**Part 3:
Spectral transmittance**

*Microscopes — Désignation des objectifs de microscope —
Partie 3: Facteur de transmission spectrale*

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Foreword

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The committee responsible for this document is ISO/TC 172, *Optics and photonics*, Subcommittee SC 5, *Microscopes and endoscopes*.

ISO 19012 consists of the following parts, under the general title *Microscopes — Designation of microscope objectives*:

- *Part 1: Flatness of field/Plan*
- *Part 2: Chromatic correction*
- *Part 3: Spectral transmittance*

Introduction

The spectral transmittance of microscope objectives is an important parameter that allows users to choose the appropriate product for a given application. Certain elements of glass material, cements, coatings, and optical design will have an effect on the spectral transmittance characteristics of microscope objectives. For example, one can choose to emphasize broad ranges of wavelengths or peak transmission in narrow bands or trade-off aberrations vs wavelength range. Therefore, the design of the lens set determines its spectral transmittance. A standard way to represent the spectral transmittance as a result of its design criteria was developed to address this important requirement.

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